

GAO Report Review
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EDS
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Purpose

This paper discusses steps the Center for Information Management (the "Center") can undertake to effectively respond to the recommendations included in the United States General Accounting Office (GAO) report, "Defense Management - Stronger Support Needed for Corporate Information Management Initiative To Succeed," dated April 1994.

Background

The GAO made seven specific recommendations to the Secretary of Defense to add impetus to the Corporate Information Management (CIM) initiative. These recommendations are as follows:

- Develop a management strategy with well-defined roles and authorities.
- Seek the views of outside expert practitioners to provide independent perspectives on the CIM initiative.
- Develop a cohesive, complete strategic plan to guide CIM implementation and integration.
- Establish an appropriate balance between departmental efforts to reengineer and integrate business processes and to standardize systems.
- Require that migration systems be supported by sound economic and technical analyses before implementation.
- Require that costs and benefits of major processes and systems improvements be assessed prior to making investment decisions and that post-audits be performed to assess benefits and verify cost savings obtained.
- Direct that Principal Staff Assistants establish plans consistent with the overall strategic plan's goals and objectives.

These recommendations are not necessarily separate and discrete from one another. They are in fact interrelated and mutually dependent. This paper proposes a service and marketing strategy to enable the Center to simultaneously respond to all of these recommendations and in the process inspire and motivate the adoption and application of CIM principles throughout DoD.

Develop a management strategy with well-defined roles and authorities

The Center has initiated a statement of work (SOW) to perform an Organizational Assessment of the Center to identify where the organization is functioning effectively and highlight any gaps or inefficiencies inherent to the organization structure. This should evolve into an ongoing activity to maintain the focus of the Center and to monitor continuing progress toward CIM goals.

This is, however, only part of the solution. *The Center must clearly define its role in the CIM process and its relationship with other DoD entities both internal and external to DISA.* The role and authority of the Center is not clearly understood by the customer community. For example, the relationship with the Center for Integration and Interoperability (CFI&I) is unclear and confusing. It is difficult for the functional community to ascertain how the service offerings and capabilities of the respective organizations and their contracts (CIM-SETA and DEIS) complement one another.

CFI&I seems to have a clearly defined role with respect to the "implementation" of enterprise integration improvements and the accelerated standardization of migration systems. However, the decision to move forward with any of these improvements must be supported by a functional economic analysis (FEA), clearly quantifying the benefits or savings to be realized through the implementation of a business process improvement. Automated Information System (AIS) costs represent only one dimension of these improvements, and in some instances may not even apply. This is implicit in the GAO's observations regarding the matter.

The Center needs to position itself to maximize its contribution to the overall CIM program and to clearly respond to the concerns of the GAO report. A substantive basis for this positioning can be found in DoD 8020.1-M, Chapter 10, as amended in January 1993. Figure 1, "Process Improvement Decision-Making" is adopted from DoD 8020.1-M and can be used to define the Center's role in the process. Specifically, this process depiction also accomplishes the following:

- Clearly highlights the review authority of the functional community in the form of the OSD PSA, or in a broader sense the Corporate Functional Integration Board (CFIB).
- Provides a basis for linkage to the recently established DoD Enterprise Integration (EI) Corporate Management Council. The CFIB, as a standing committee reporting to the EI Corporate Management Council, would be a natural vehicle to make progress in a specific functional area visible and available at the "enterprise" level.
- Provides a basis for defining interaction between the CIM-SETA and DEIS programs. Given the implementing role of CFI&I, that organization must be involved in the production or update of detailed AIS implementation plan for incorporation into a System Decision Paper.

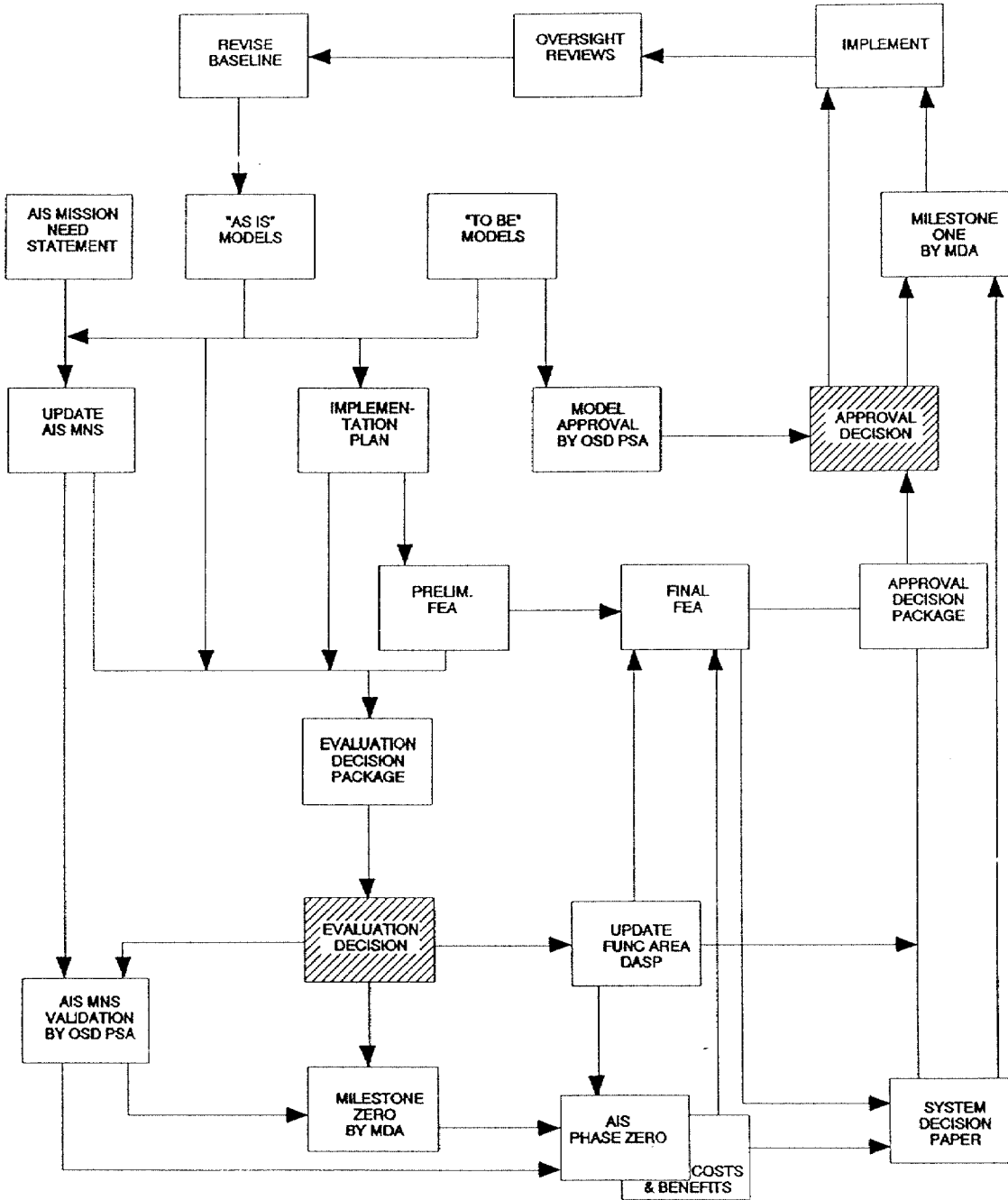


Figure 1. Process Improvement Decision-Making

The process also provides for Oversight Reviews. The Center should assume an active role in these reviews in order to:

- Quantify the value realized through the implementation of approved process improvements relative to those identified in the FEA.
- Measure the degree of use of Center developed processes, tools, and techniques to evaluate their value-added to the implementation process and to provide a means for fostering continuous improvement of those processes, tools, and techniques.

It is assumed that CFI&I would be accountable for the AIS implementation aspect in its role as the agent to accelerate the consolidation and migration of legacy systems. The Center's principal role would be to capture the value-added or economic benefit realized through an implementation; and to do so in terms of process and data.

Seek the views of outside expert practitioners to provide independent perspectives on the CIM initiative

The Center with its CIM-SETA contract vehicle is in a strong position to facilitate external review of the CIM initiative. While many of the tasks completed during the first year of the contract were narrowly defined and designed to extend the internal capabilities of the Center's directorates, the Center has recently initiated a number of tasks designed to solicit external perspectives on the methods, tools, and techniques being employed in support of the CIM initiative. These include the Organizational Assessment, and a task to review and integrate the service offerings of the Software Systems Engineering Directorate.

By providing opportunities for contractors to become involved in the planning process, the Center will foster an environment of partnership between itself and industry. This approach will allow the Center to more effectively incorporate the skills of its contractor base, both technical and non-technical, into the CIM program.

Develop a cohesive, complete strategic plan to guide CIM implementation and integration..... andDirect that Principal Staff Assistants establish plans consistent with the overall strategic plan's goals and objectives

The establishment of a cohesive, complete strategic plan to guide CIM implementation and integration is essential to generate the top-level management commitment necessary to the success of the CIM program. It will provide a tool whereby senior DoD managers can evaluate progress toward program goals and make judgements as required.

The strategic planning process should be iterative and will occur at many levels. The top-level plan to guide CIM implementation and integration will be supplemented by Functional Area Strategic Plans that include specific performance measures that can be related to the goals and objectives of the overall DoD plan. These plans are further supported by more detailed implementation plans that guide the near-term actions to be taken by Functional Activity Program Managers (FAPMs) within a specific functional activity. The key challenge is to establish a "linkage" between these plans from top to bottom.

The Center should collaborate with the OSD PSAs and their designated FAPMs to develop functional area strategic plans and establish linkage with the overall CIM strategic plan.

Completion of these strategic plans and the as-is process, data, and cost baselines will allow functional decision-makers to target implementation of those functional process improvements that contribute most to overall CIM goals. Adoption of this strategy will promote the Center's early involvement in the functional process improvement cycle, enhance their ability to offer continuing assistance, and promote the institutionalization of the Center's methods, techniques, and tools.

Establish an appropriate balance between departmental efforts to reengineer and integrate business processes and to standardize systems.

There is no reason to ignore the near-term savings and benefits to be realized from the standardization of systems or selection of migration systems. Introducing some control over the legacy environment is essential to the long-term goals of integration and interoperability. The challenge is to do so in a way that is measurable and complements the functional requirements of the business processes in question.

The Center has made progress in the development or adoption of standard processes and tools and must now seek opportunities to apply these throughout the Services and DoD. This will have the additional effect of accelerating the pace of business process reengineering and integration and promote a balance with the emphasis on selecting migration systems. This will

require the establishment of alliances with the relevant OSD Principal Staff Assistants and FAPMs. The CIM-SETA contractor base should be leveraged to generate relationships with specific functional elements of the Services and DoD. This multi-level marketing strategy will have the corollary effect of promoting a true partnership between the Center and its industry partners.

Optimally, some degree of as-is/to-be modeling will have preceded significant progress in the selection of migration or standard systems. However, in those circumstances where movement toward a near-term migration environment is already underway, a clear model of the processes being supported by the migration system(s) will provide a sound basis for measuring the benefits and savings associated with a particular program. These models are an important construct that support continuous process improvement. The operative word here is balance. *Regardless of the particular focus adopted in a given functional area, the application of the same underlying analysis techniques and tools applies equally and can be used as a tool to maintain the balance between business process reengineering and systems standardization.*

Require that migration systems be supported by sound economic and technical analyses before implementation.

This recommendation is consistent with DoD 8020.1-M. In the January 1993 change to this planning guidance it is clearly specified that:

"The proposal to designate an existing (or planned and approved) AIS as a migration system will be supported by preparation of a current SDP and supporting LCM documentation. This requirement applies even if the AIS is fully deployed and operational since designation as a migration system implies by definition that the AIS will be subject to future modernization through functional process improvement and/or technical enhancement."

While the Technical Management Plan (TMP) as a separate document is no longer required as per the January change, the technical management planning requirement has not been eliminated. This information will be included in the System Decision Paper (SDP) and LCM documentation. This documentation is also to include the preliminary FEA, which is to be prepared based on available information in advance of detailed technical management planning.

The Center should advocate adherence to the processes outlined in DoD 8020.1-M regardless of the progress made in selecting migration systems for a functional area. The technology directorates of the Center and JIEO can also assist the functional communities and CFI&I in the technical evaluations of candidate systems. ***The resultant products including process, data, and cost models will provide a basis for the informed selection of migration systems, and will establish a framework for an enduring environment that supports continuous process improvement.***

While it is agreed that migration systems must be supported by sound economic and technical analyses before implementation, the selection process should *not* be slowed to accommodate detailed economic/technical analysis. Many of the candidate systems are already fielded and offer substantive value relative to the underlying business processes. Rather, the emphasis on minimizing the number of legacy systems supporting any given function is absolutely essential to make the DoD environment more manageable. The key point is to press forward with the modeling of the current and desired functional environments so that the infrastructure is in place to guide future enhancement, development, and enhancement of migration and target systems; and to support the ongoing measurement of cost and benefit relative to an established baseline.

Require that costs and benefits of major processes and systems improvements be assessed prior to making investment decisions and that post-audits be performed to assess benefits and verify cost savings obtained.

The process improvement decision-making chain defined in DoD 8020.1-M clearly provides for these steps in the form of the FEA, to assess the benefits of major processes and systems improvements prior to making investment decisions, and Oversight Reviews to verify the benefits and cost savings attributable to the process improvement. The Center should use this process in asserting itself as a catalyst and accelerator to the DoD Information Management (IM) program.

If the Center is to be a major enabler of the DoD IM program it must be viewed as an enabler to the decision-making process which in turn must be viewed as an enabler to managing change. For example, the time to complete a FEA properly and the costs to validate the benefits attributable to an implementation of a process or system change are often viewed as:

- Time wasted relative to the pursuit of immediate or near-term savings or benefits. While these types of savings may be significant and are certainly desirable, they tend to be one-dimensional in nature and focused on operational cost reduction; rather than multi-dimensional and grounded in a performance improvement to the underlying business process or function being supported.
- Expense items which dilute the less moderate savings generated by a narrowly defined process or system improvement.

The Center should seek opportunities to assist functional activities in establishing a quantifiable basis for making process improvement investments and to mitigate the perception that the costs and time associated with ongoing economic analysis are prohibitive. The Center already has relevant service offerings and capabilities in place through its directorates and contractor base. These include Process Modeling, Data Modeling, Activity-Based Costing (ABC), and Functional Economic Analysis. ***Service opportunities that allow for the "bundling" of these services, combined with limited prototyping to demonstrate the value assessments contained within a FEA, should be solicited.*** Current efforts tend to lose momentum because they are terminated or interrupted at the end of one facet of this analysis (i.e. modeling, ABC, economic analysis). Inclusion of a limited prototyping activity designed to demonstrate the performance improvements motivating a proposal, will generate critical commitment from functional stakeholders before a large information technology investment is made or highlight inadequacies that need to be evaluated further. It also could constitute a logical hand-off point to the CFI&I, where cross-functional technical integration issues can be substantively addressed, or another implementing authority.

Equally important is that the products generated during this process provide a means for measuring and monitoring the benefits associated with a change implementation. ***These integrated process, data, and ABC models can also be used as mechanisms to develop an iterative environment that promotes continuous process improvement.***

Summary

- *The Center must clearly define its role in the CIM process and its relationship with other DoD entities both internal and external to DISA.*
- *The Center should collaborate with the OSD PSAs and their designated FAPMs to develop functional area strategic plans and establish linkage with the overall CIM strategic plan.*
- *By providing opportunities for contractors to become involved in the planning process, the Center will foster an environment of partnership between itself and industry.*
- *The Center has made progress in the development or adoption of standard processes and tools and must now seek opportunities to apply these throughout the Services and DoD.*
- *Service opportunities that allow for the "bundling" of these services, combined with limited prototyping to demonstrate the value assessments contained within a FEA, should be solicited.*
- *Regardless of the particular focus adopted in a given functional area, the application of the same underlying analysis techniques and tools applies equally and can be used as a tool to maintain the balance between business process reengineering and systems standardization.*
- *The resultant products including process, data, and cost models will provide a basis for the informed selection of migration systems, and will establish a framework for an enduring environment that supports continuous process improvement.*
- *These integrated process, data, and ABC models can also be used as mechanisms to develop an iterative environment that promotes continuous process improvement.*